



## Controlling sediment and phosphorus transfer to receiving waters - A strategic management perspective for England and Wales

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### Abstract:

The adverse ecological effects of elevated levels of phosphorus (P) and fine sediment (termed silt) in surface waters are a major environmental issue both nationally and internationally. Increasingly, the Water Framework Directive (WFD) will provide the basis for the integrated management of European waters, but there is a more immediate need for action to safeguard designated wildlife sites from the effects of eutrophication and siltation. We outline the policy drivers behind the control of these pollution problems, the nature and extent of ecological risks and approaches to target-based management within catchments. Tackling diffuse sources of P and silt requires accurate apportionment of local sources and contributing areas, and integration of practical action with the development of an improved quantitative understanding of the management changes needed in catchments to meet environmental objectives. Such an approach can be used to refine policies on land-based emissions of these pollutants and operational strategies for control. The critical role of catchment appraisal through modelling within this approach is stressed. Management measures to control agricultural sources of P and silt will also help to address other key catchment management objectives (flood risk management, water resource management, terrestrial and wetland habitat restoration). Climate change predictions indicate that the need for integrated catchment management, to increase the resilience of catchments, wildlife and people to extremes of weather conditions (drought and flood) and temperature trends, has never been greater. © 2007 Elsevier B.V. All rights reserved.

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### Resource Description

#### Communication: ☒

resource focus on research or methods on how to communicate or frame issues on climate change;  
 surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience: ☒

audience to whom the resource is directed

Policymaker

#### Exposure : ☒

# Climate Change and Human Health Literature Portal

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Extreme Weather Event, Food/Water Quality

**Extreme Weather Event:** Flooding

**Food/Water Quality:** Chemical

**Geographic Feature:** 

resource focuses on specific type of geography

Freshwater

**Geographic Location:** 

resource focuses on specific location

Non-United States

**Non-United States:** Europe

**European Region/Country:** European Country

**Other European Country :** England;Wales

**Health Impact:** 

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

Adaptation

**Model/Methodology:** 

type of model used or methodology development is a focus of resource

Exposure Change Prediction

**Resource Type:** 

format or standard characteristic of resource

Research Article, Research Article

**Timescale:** 

time period studied

Time Scale Unspecified

**Vulnerability/Impact Assessment:** 

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content